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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,128	09/20/2001	Andrew D. Murdin	032931-0252	9510

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EXAMINER
DUFFY, PATRICIA ANN

ART UNIT	PAPER NUMBER
1645	8

DATE MAILED: 04/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/857,128	Murdin et al
Examiner	**Art Unit**
Patricia A. Duffy	1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *one* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☒ Claims *1-39* are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *Longbottom et al*

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1-19, 25 and 38(a), drawn to nucleic acids, vectors, host cells and a method of producing the polypeptide CPN 100635 (SEQ ID NOs:3, 4, 12 and 13), fragments and compositions thereof which is the first recited technical feature.

Group 2, claim(s) 20-24, 27-34 and 38(b) drawn to the polypeptide of CPN 100635 (SEQ ID NOs:12 and 13), fragments and compositions thereof, which is the second recited technical feature.

Group 3, claims 27, 35 and 38 (c), drawn to an antibody that binds the polypeptide of CPN 100635 (SEQ ID NOs:12 and 13), fragments and compositions thereof, which is the third recited technical feature.

Group 4, claim 36 (a), drawn to a method of treatment using a nucleic acid, the second method of use of the first recited technical feature.

Group 5, claim 36 (b), drawn to a method of treatment using a polypeptide, the first method of use of the second recited technical feature.

Group 6, claim 36 (c), drawn to a method of treatment using an antibody, the first method of use of the third recited technical feature.

Group 7, claim 37(a), drawn to a method of detection using a nucleic acid, the third method of use of the first recited technical feature.

Group 8, claim 37(b), drawn to a method of detection using a polypeptide, the second method of use of the second recited technical feature.

Group 9, claim 37(c), drawn to a method of detection using an antibody, the second method of use of the third recited technical feature.

Group 10, claim 39, drawn to a method for identifying a polypeptide which induces an immune response effective to prevent or lessen the severity of *Chlamydia* infection, the third method of use of the second recited technical feature.

Group 11, claim(s) 1-19, 25 and 38(a), drawn to nucleic acids, vectors, host cells and a method of producing the polypeptide CPN 100638 (SEQ ID NOs:5, 6 and 14), fragments and compositions thereof which is the fourth recited technical feature.

Group 12, claim(s) 20-24, 27-34 and 38(b) , drawn to the polypeptide of CPN 100638 (SEQ ID NO:14), fragments and compositions thereof, which is the fifth recited technical feature.

Group 13, claims 27, 35 and 38(c), drawn to an antibody that binds the polypeptide of CPN 100638 (SEQ ID NO:14), fragments and compositions thereof, which is the sixth recited technical feature.

Group 14, claim 36(a), drawn to a method of treatment using a nucleic acid, the second method of use of the fourth recited technical feature.

Group 15, claim 36(b), drawn to a method of treatment using a polypeptide, the first method of use of the fifth recited technical feature.

Group 16, claim 36(c), drawn to a method of treatment using an antibody, the first method of use of the sixth recited technical feature.

Group 17, claim 37(a), drawn to a method of detection using a nucleic acid, the third method of use of the fourth recited technical feature.

Group 18, claim 37(b), drawn to a method of detection using a polypeptide, the second method of use of the fifth recited technical feature.

Group 19, claim 37(c), drawn to a method of detection using an antibody, the second method of use of the sixth recited technical feature.

Group 20, claim 39, drawn to a method for identifying a polypeptide which induces an immune response effective to prevent or lessen the severity of *Chlamydia* infection, the third method of use of the fifth recited technical feature.

Group 21, claim(s) 1-19, 25 and 38(a), drawn to nucleic acids, vectors, host cells and a method of producing the polypeptide CPN 100639 (SEQ ID NOs:7, 8 and 15), fragments and compositions thereof which is the seventh recited technical feature.

Group 22, claim(s) 20-24, 27-34 and 38(b) , drawn to the polypeptide of CPN 100639 (SEQ ID NO:15), fragments and compositions thereof, which is the eighth recited technical feature.

Group 23, claims 27, 35 and 38(c), drawn to an antibody that binds the polypeptide of CPN 100639 (SEQ ID NO:15), fragments and compositions thereof, which is the ninth recited technical feature.

Group 24, claim 36(a), drawn to a method of treatment using a nucleic acid, the second method of use of the seventh recited technical feature.

Group 25, claim 36(b), drawn to a method of treatment using a polypeptide, the first method of use of the eighth recited technical feature.

Group 26, claim 36(c), drawn to a method of treatment using an antibody, the first method of use of the ninth recited technical feature.

Group 27, claim 37(a), drawn to a method of detection using a nucleic acid, the third method of use of the seventh recited technical feature.

Group 28, claim 37(b), drawn to a method of detection using a polypeptide, the second method of use of the eighth recited technical feature.

Group 29, claim 37(c), drawn to a method of detection using an antibody, the second method of use of the ninth recited technical feature.

Group 30, claim 39, drawn to a method for identifying a polypeptide which induces an immune response effective to prevent or lessen the severity of *Chlamydia* infection, the third method of use of the eighth recited technical feature.

Group 31, claim(s) 1-19, 25 and 38(a), drawn to nucleic acids, vectors, host cells and a method of producing the polypeptide CPN 100708 (SEQ ID NOs:9, 10 and 16), fragments and compositions thereof which is the tenth recited technical feature.

Group 32, claim(s) 20-24, 27-34 and 38(b) , drawn to the polypeptide of CPN 100708 (SEQ ID NO:16), fragments and compositions thereof, which is the eleventh recited technical feature.

Group 33, claims 27, 35 and 38(c), drawn to an antibody that binds the polypeptide of CPN 100708 (SEQ ID NO:16), fragments and compositions thereof, which is the twelfth recited technical feature.

Group 34, claim 36(a), drawn to a method of treatment using a nucleic acid, the second method of use of the tenth recited technical feature.

Group 35, claim 36(b), drawn to a method of treatment using a polypeptide, the first method of use of the eleventh recited technical feature.

Group 36, claim 36(c), drawn to a method of treatment using an antibody, the first method of use of the twelfth recited technical feature.

Group 37, claim 37(a), drawn to a method of detection using a nucleic acid, the third method of use of the tenth recited technical feature.

Group 38, claim 37(b), drawn to a method of detection using a polypeptide, the second method of use of the eleventh recited technical feature.

Group 39, claim 37(c), drawn to a method of detection using an antibody, the second method of use of the twelfth recited technical feature.

Group 40, claim 39, drawn to a method for identifying a polypeptide which induces an immune response effective to prevent or lessen the severity of *Chlamydia* infection, the third method of use of the eleventh recited technical feature.

Group 41, claim(s) 1-19, 25 and 38(a), drawn to vaccine vectors of CPN 100634 (SEQ ID NOs:1, 2 and 11), fragments and compositions thereof which is the thirteenth recited technical feature.

Group 42, claim(s) 20-24, 27-34 and 38(b) , drawn to fusion polypeptides of CPN 100634 (SEQ ID NO:11), fragments and compositions thereof, which is the fourteenth recited technical feature.

2. The inventions listed as Groups 1-42 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature of Group 1 is the nucleic acid encoding SEQ ID NO:12, the nucleic acid of SEQ ID NOs:3 or 4 or fragments encoding at least 12 consecutive amino acids of SEQ ID NO:12. The art of Longbottom et al, Infection and Immunity 66(4):1317-1324, April 1998 teach a nucleic comprising a *Chlamydia psittaci* polypeptide that has at least 12 consecutive amino acids in common with SEQ ID NO:12 (residues 505-516 of are 100% identical to residues 602-613 of SEQ ID NO:12 see attached alignment and corresponding nucleic acid sequences. Therefore, Unity of Invention is not fulfilled because there is not a technical feature that is "special", in that the technical feature does not define a contribution over the art. As such, the nucleic acid lacks unity of invention with each of the polypeptide(s) of SEQ ID NO:12 (Group 2) and the antibodies that bind SEQ ID NO:2 (Group 3). Each of Groups 4-10 represent different methods of use of the first technical feature or different methods of use of the second and third

technical features as defined above. It is noted that certain claims appear in more than one Group of invention based upon the alternative Markush language recited. Since these claims alternatively require a different technical feature or require use of a different technical features in common, the claims lack unity of invention. As such, should any of these Groups be elected, they will be examined only to the extent that they read on the technical feature recited in the Group as defined above.

As to Groups 1-42, each of the nucleic acids encoding the polypeptides of SEQ ID NOs:11-16, polypeptides and antibodies defined as the first to fourteenth technical features above, lack common structural feature/common core sequence. Each of the polynucleotides encoding the polypeptides, polypeptides and antibodies defined as special technical features above fail to (1) share a common utility and (2) share a substantial structural feature disclosed as being essential to that utility. As such, each of the different technical features recited as first through fourteenth above lack a corresponding technical feature and by definition do not meet the requirements of PCT Rule 13.2. Each of the nucleic acids encoding different polypeptides lack a corresponding special technical feature and are deemed to lack unity of invention. Similarly, each of the polypeptides lack a corresponding technical feature with each other and each of the antibodies lack a corresponding technical feature with each other and are deemed to lack

unity of invention, each with the other. Further, in the instant case, the claims recite multiple different methods with different goals and different method steps that rely upon fourteen different technical features and therefore these methods also lack unity of invention because they lack a technical feature in common within the meaning of PCT Rule 13.2.

3. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

5. Any inquiry of a general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for Group 1600 is (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia A. Duffy, Ph.D. whose telephone number is (703) 305-7555. The examiner can normally be reached on Monday-Friday from 9:30 AM to

6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith, can be reached at (703) 308-3909.

Patricia A. Duffy, Ph.D.
April 24, 2003

Patricia A. Duffy, Ph.D.
Primary Examiner
Group 1600